

115 Ismail, MM; Jayakody, RL; Weil, GJ; Nirmalan, N; Jayasinghe, KS; Abeyewickrema, W; **Sheriff, MHR**; Rajaratnam, HN; Amarasekera, N; De Silva, DC; Michalski, ML; Dissanaika, AS

Efficacy of single dose combinations of albendazole, ivermectin and diethylcarbamazine for the treatment of bancroftian filariasis. JArticle; Transactions of the Royal Society of Tropical Medicine and Hygiene; Vol: 921; No.(1); 1998_94-97pp

Abstract : In a 'blind' trial on 50 male asymptomatic microfilaraemic subjects with *Wuchereria bancrofti* infection, the safety, tolerability and filaricidal efficacy of a single dose of albendazole (alb) 600 mg alone or in combination with ivermectin (iver) 400 micrograms/kg or diethylcarbamazine citrate (DEC) 6 mg/kg was compared with a single dose of the combination DEC 6 mg/kg and iver 400 micrograms/kg over a period of 15 months after treatment. All but one subject, with 67 microfilariae (mf)/mL, had pre-treatment counts > 100 mf/mL. All 4 treatments significantly reduced mf counts, but alb/iver was the most effective regimen for clearing mf from night blood: 9 of 13 subjects (69%) were amicrofilaraemic by membrane filtration 15 months after treatment compared to one of 12 (8%), 3 of 11 (27%), and 3 of 10 (30%) in the groups treated with alb, alb/DEC, and DEC/iver, respectively. Filarial antigen tests suggested that all 4 treatments had significant activity against adult *W. bancrofti*; alb/DEC had the greatest activity according to this test, with antigen levels decreasing by 77% 15 months after therapy. All 4 regimens were well tolerated and clinically safe, although mild, self-limited systemic reactions were observed in all treatment groups. These results suggest that alb/iver is a safe and effective single dose regimen for suppression of microfilaraemia in bancroftian filariasis that could be considered for control programmes. Additional benefits of this combination are its potent, broad spectrum activity against intestinal helminths and potential relative safety in areas of Africa where DEC cannot be used for filariasis control because of co-endemicity with onchocerciasis or loiasis.